**oakwood
design**

Oakwood Series 6 Laminators

- Range of Platen Sizes • Card and Photo Punch Equipment
- ID Card Sets • Card Design and Development

1987

- # PVC ID CARD & SHEET LAMINATORS
- # 5 TO 216 CARDS PER CYCLE
- # MULTI PRESSURE
- # LCD FOR ACCURATE RECALL OF CYCLE SETTINGS

The trend away from polyester cards towards high security PVC identity cards has been hampered in the past by the need for laminating equipment capable of achieving professional results by unskilled operators.

Machines used for this purpose have previously provided inefficient control of the critical functions of heat, pressure and time, creating extreme difficulty in defining and recalling the ideal cycle settings.
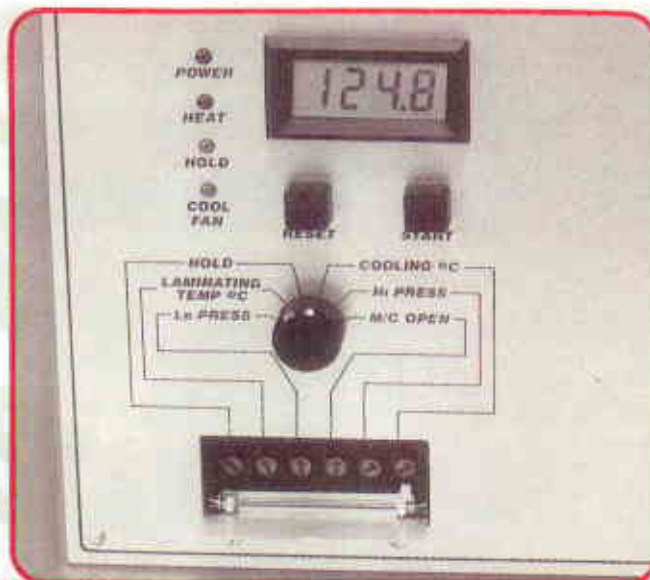
Oakwood Design, the specialist designers and manufacturer of a full range of automated equipment for PVC card production have provided the answer with the versatile Series 6 range of card laminators.

These revolutionary desk top machines are the most efficient and technically advanced laminators ever devised; and yet the most simple to operate. They provide the ability to identify and control all cycle settings with precise accuracy ensuring consistent and high quality laminating results of even the most sophisticated cards.

Processor Control

All machine controls are displayed on the laminator face panel for ease of operation. Controls comprise a selector knob indicator for the cycle conditions with six corresponding setting controls under a facia cover each linked to the LCD display. The series of lights glow during the laminating cycle indicating the cycle sequence.

Machine function settings are altered by movement of the six setting controls corresponding to each stage of the laminating cycle, each setting controlled by a processor circuit board. By tuning the blue setting controls when the master knob is set to any of the six cycle conditions each function will read out on the LCD display. A simple method of accurately recording the ideal cycle settings for all types of card is therefore provided.

LCD & Control Panel

Choose From Nine Sizes

The Series 6 range comprises nine laminators, designed to ensure that a solution is available for every project. Whether it be the large scale national identity card or drivers licence; or even the small commercial ID card, Oakwood have a laminator for the purpose. Many card manufacturers are also finding the Series 6 exceptionally convenient for use in the laboratory for defining the ideal cycle conditions and ink colour change etc, prior to large scale card manufacture.

Safety Features

Personal safety is vital with the operation of all machines particularly those likely to be associated with non skilled labour. Several precautions are built into the Series 6 to provide maximum safety, but also to ensure convenience in operation.

A cycle reset button is incorporated on the front face panel and a thermal cut-out switch is sited on the back of the machine casing. If at any time, mains power to the laminator fails, on reapplying power, the machine is designed to carry out the reset function automatically.

Model	Cards per Cycle	Cycle (mins)	Platen size	Water Cooled	Typical Applications
6A	5	5 to 8	107 x 148mm	Optional	Small ID systems and laboratory testing
6AP	5	5 to 8	107 x 148mm	Optional	With Integral punch
6B	10	6 to 9	123 x 160mm	Optional	National ID systems
6BP	10	6 to 9	123 x 160mm	Optional	With integral punch
6C	20	10 to 12	168 x 248mm	Standard	Bureau ID card facility
6D	48	10 to 12	220 x 309mm	Standard	Small scale sheet laminator
6D/2	96	12 to 15	220 x 309mm	Standard	Small scale sheet laminator
6E	108	12 to 15	410 x 309mm	Standard	Professional laminator
6E/2	216	12 to 15	410 x 309mm	Standard	Professional laminator

Model 6D Laminator.
– Single Daylight.

Simple operation

The laminators are electrically heated, air cooled and powered by means of a normal wall plug. They incorporate the process control system and many of the advanced features used on the Oakwood range of PVC sheet laminators.

They are delivered complete with two laminating trays, two sets of laminating plates and a starter pack of cushioning paper. Just lift the machine from its specially designed protective travelling case, plug it in and commence laminating.

The card sets to be laminated are inserted between stainless steel laminating plates and inserted into the machine on the laminating tray. When pushed fully into the laminating aperture, the tray will automatically activate a micro switch which acts as a safety device. Press the start button and the remaining cycle is fully automatic.

Heat and pressure are applied for the initial heating cycle and varied as required during the hold and cooling period.

When the laminating process is complete the machine will automatically open to allow the tray containing the laminated cards to be withdrawn. The second tray containing the next set of cards can be inserted for processing, whilst the first tray is unloaded and prepared again to repeat the operation.
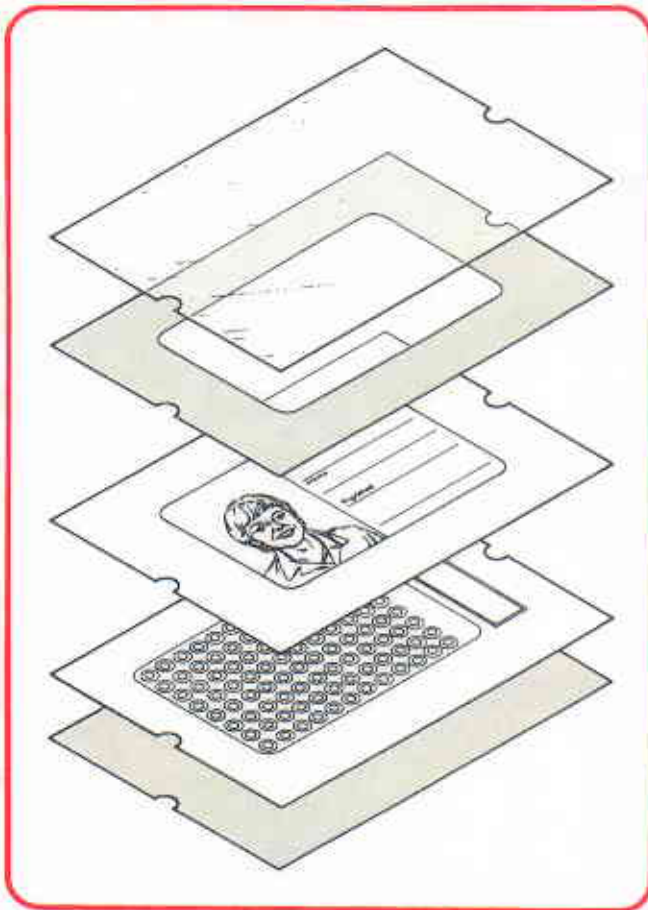
Oakwood Shear Punch

Having taken the utmost care with the design and construction of a secure card, the last stage of punching should ideally reflect a similar quality result.
Oakwood have developed a card punch mechanism which slices through the card from diametrically opposite corners using a similar action to that incorporated on a guillotine.
The punch action is similar in design to that used in the Oakwood large volume automatic Punch Presses and produces cards to ISO standard sizes.

Model	Technical		Power	Shipping Dimensions	
	Laminating temperature			Weight	Size
6A	200C	392F	240 volts 12 amps or 110 volts 16 amps	40K 88lbs	57 x 62 x 60cm
6B	200C	392F	240 volts 12 amps or 110 volts 16 amps	40K 88lbs	57 x 62 x 60cm
6C	200C	392F	240 volts 20 amps	40K 88lbs	57 x 62 x 60cm
6D	200C	392F	380/415 volts 40 amps 3ph 50hzs	75K 160lbs	63 x 72 x 60cm
6D/2	200C	392F	380/415 volts 40 amps 3ph 50hzs	80K 170lbs	63 x 72 x 75cm
6E	200C	392F	380/415 volts 40 amps 3ph 50hzs	90K 190lbs	63 x 110 x 60cm
6E/2	200C	392F	380/415 volts 80 amps 3ph 50hzs	100K 213lbs	63 x 110 x 75cm

Card set for machine reading application.

OAKWOOD TOTAL SERVICE PHILOSOPHY

Plastic bank and credit cards have now set design and security standards for identity cards used for a multitude of applications. In addition to supplying equipment the Oakwood Research Centre offers a first class professional card system design service. Whether the requirement is for national registration, commercial ID, or cards for specialist machine reading applications, large or small volume, Oakwood will provide the technical solution and TOTAL production system including all materials ready for production by semi-skilled operators.

Machine Reading Applications

The plastic card represents an ideal carrier used increasingly to identify a person to a computerised system in todays world of hi-technology. By inserting specialist coding either on the surface or into the core structure the plastic card becomes a new tool in todays computerised systems. Cards for many machine reading applications have already been designed by Oakwood. These include applications for varying types of bar codes, magnetic stripes, inductive codings, and other types of codes generally used for security access control, time attendance recording, shop floor data collection and health monitoring.

Oakwood technicians are skilled in the use of PVC polyester and epoxy substrates and have packaged the most sophisticated micro chips within the core structure of a card. This experience combined with the Oakwood state of the art equipment combines to ensure the ideal solution is available for any customer application.

Coding Systems

Many of the more sophisticated cards are made possible due only to the flexibility of the heat and pressure system which is a major feature of the Series 6 Laminators. The use of special laminating trays and plates designed to provide layer to layer registration of coding inserts to the final punched card demonstrates the high degree of engineering solutions required for todays ID cards.

High Security Graphics

There are practically no limits to the security features which can be incorporated on a plastic card to protect from risks of forgery and counterfeiting. In addition to size, shape and thickness which can all be varied for the specific application the printing of high security features set standards of security similar to those used in banknotes.
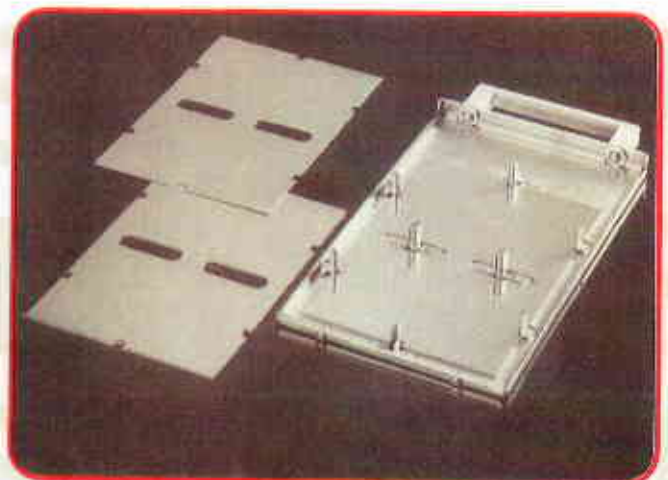
These features can include fine line rainbow guilloche techniques together with watermark images in the base PVC. Unique holograms at affordable prices are also available together with raised embossed images, invisible printing techniques and signature panels in varying forms.
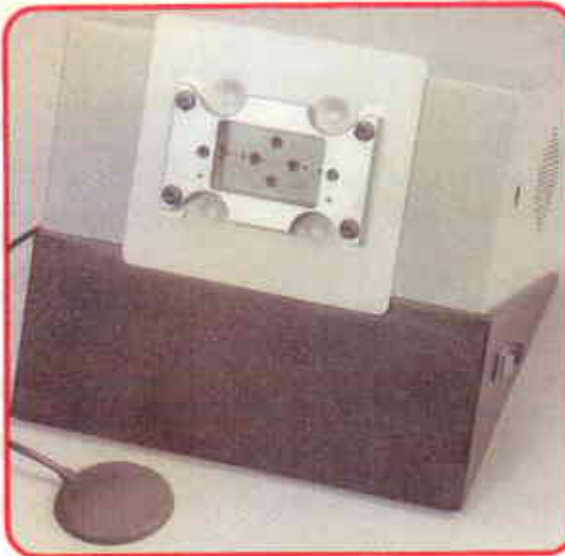
Photographs & Personalised Text

Oakwood security card systems can also include photographs and personalised text within their structure protected by the security features already described. Original photographs can be inserted with typed data to suit the individual application and method of issue. A full range of photographic equipment including multi-shot automatic cameras suitable for every requirement can also be supplied.

Computerised Data Handling

For national identity, driving licence and other large scale programs, the problems of high cost of film processing, bulky photo storage and card re-issue need careful attention. Oakwood are involved in supply of systems which solve these problems by use of video scanning, computerised image archiving and laser printing. These innovative techniques fully integrate the whole process to create an efficient and economical system.
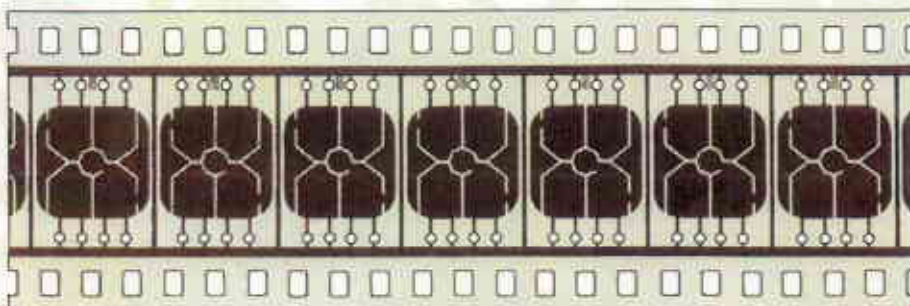

Typical Plate Location System.

Electric Card Punch.   *Manual Card Punch.*   *Hand Photo Punch.*

OAKWOOD IDENTITY CARD & PHOTO PUNCHES

Electric card punch		*Manual card punch*	*Hand photo cutter*
Power operated with foot pedal control for cutting PVC or similar materials. Guaranteed accuracy and bank card quality cut.		Used for occasional production and for non-bank card quality.	Small and convenient to use to cut photographic film and paper. Widely accepted for many applications where pictures are to be cut to an exact size. Uses include passport Visas, ID cards and driving licences.
Applications: Bank cards Identity cards Luggage tags Useful when operating with a group of small laminators Can be fitted with outrigger location pins and auxilary punches.		Application: Identity cards	
Product Size	Standard size 85mm x 54m Max size 92mm x 114mm Special designs available	Standard size 85mm x 54mm Max size 92mm x 114mm Special design available	10 sizes Small range 25 x 32 mm up to 45 x 51 mm Large range to 45 x 70 mm Special shapes available
Material Thickness	0.2 mm – 2 mm	0.2 mm – 0.8 mm	0.1 mm – 0.3 mm
Power	220-240v-50Hz 110v 60Hz		
Shipping Weight	60kgs	15kgs	2kgs
Shipping Dimensions	55 x 55 x 45 cms	28 x 30 x 35 cms	7.5 x 7.5 x 15 cms

Oakwood 35mm Micro Chip Punches

Single and multi aperture punches based on the electric model are available to special order.

Models available for manual product indexing and for automatic indexing.

About Oakwood Design

In many languages on all five continents of the world the name Oakwood Design means efficient production of quality banking cards. Oakwood are design engineers who have used microprocessor and electronics technology to develop a range of equipment for the production of PVC cards for a wide variety of applications. A range of over 40 machines includes the Magnetic Tapelayer which is now the industry standard for laying a flush stripe demanded for reliable ATM machine reading. Other equipment includes the automatic print registration Guillotine and Punches, Hi-Speed Hologram & Signature Panel Machines, Electronic Inspection &

Auto Boxing Machines and Ink Jet Encoding with Magnetic Stripe Read/Write Facility. This range of equipment has combined to bring present day technology into card production and have made Oakwood undisputed market leaders in the industry.
The Letchworth plant is now regarded as the card centre of the world, where card manufacturers, end users, bankers and micro chip manufacturers find a wealth of experience to assist with their production problems. A Research and Development facility demonstrates the very latest in card production technology. If it concerns plastics cards Oakwood have the answer.

Oakwood PVC Sheet Laminators

Semi & fully automatic hydraulic lift and load systems and assembly tables available for all models.

*Power consumption refers to a full load for heating cycle of approximately 10 minutes. A consumption of 15 Kw is normal during the remaining portion of the cycle.

Model Series	Platen Size	Cards Per Sheet	Day Lights	Circa Power
Twin stack				
TS10	1020 x 720mm	80 to 100	12	250kw
TS20	1020 x 720mm	80 to 100	9	190kw
TS25	1020 x 720mm	80 to 100	6	140kw
TS30	840 x 660mm	60 to 80	12	250kw
TS40	840 x 660mm	60 to 80	9	190kw
TS45	840 x 660mm	60 to 80	6	140kw
TS50	660 x 550mm	40 to 60	12	170kw
TS60	660 x 550mm	40 to 60	9	130kw
TS65	650 x 550mm	40 to 60	6	100kw
Single stack				
*SS10	1020 x 720mm	80 to 100	10	210kw
*SS20	1020 x 720mm	80 to 100	6	140kw
*SS30	840 x 660mm	60 to 80	10	210kw
*SS40	840 x 660mm	60 to 80	6	140kw
*SS50	660 x 550mm	40 to 60	10	140kw
*SS60	660 x 550mm	40 to 60	6	100kw
*SS70	450 x 450mm	20 to 25	6	64kw
*SS80	450 x 450mm	20 to 25	4	50kw
*SS90	450 x 450mm	20 to 25	2	36kw

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